FITNESS

Understanding Endurance, Strength and Flexibility

Endurance
Endurance is the measure of your body's ability to keep up an activity without getting tired. The more endurance you have, the longer you can swim, bike, run, dance and play a sport before tiring out. When muscles are worked non-stop for 15 minutes or more, they need more oxygen to be at their best. Your level of endurance refers to how well your heart and lungs can pump oxygen-rich blood to your muscles. The more oxygen, the better your muscles work and the less tired you get.

Aerobic exercise improves your endurance because it uses a lot of oxygen. Aerobic exercise is exercise that increases your heart rate. Running, dancing, in-line skating, biking, power walking, playing soccer, jumping rope, aerobics classes and swimming are good examples of aerobic exercise. Aerobic exercise strengthens your heart and lungs and boosts your energy level. It also burns more fat and calories and can reduce the risk of heart disease, high blood pressure and diabetes.

Strength
Strength is the ability to move a muscle against resistance. The more strength you have the easier it is to do physical tasks. When a muscle tries to move and meets resistance, a contraction results. There are two kinds of contractions—static and dynamic. Static contractions (also known as isometric) happen when there is so much resistance that the object doesn't move, for instance, if you were pushing on a wall. Static contractions strengthen only the muscle that's contracting at that one angle. Dynamic contractions (also known as isotonic) happen when you use your muscles to actually move something. Lifting weights, pushing the vacuum or moving furniture cause dynamic contractions. The more intense the contraction, the bigger the improvement in strength.

Flexibility
Having a flexible body allows your joints and muscles to move through their full range of motion. When you are flexible, your joints have some give, which allows you to bend and reach with ease. The best way to become more flexible is by stretching. The correct way to stretch is to slowly extend your body to the point where you feel tension, not pain, in the muscle. It's very important that you don't bounce because that could damage the muscle fibers. Being flexible can help to prevent injuries like pulled muscles. If you have tight muscles and you try to move your body in ways you aren't used to, you run the risk of tearing muscles, ligaments, or tendons. A muscle that's strong and limber is more elastic and ready to deal with stress than a muscle that's tight.

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